

# FINANCING OF CULTURE FROM LOCAL GOVERNMENT BUDGETS IN POLAND IN THE YEARS 2000-2010 VERSUS THE PERFORMANCE BUDGETING METHOD

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## Abstract

Decentralization of public finance in Poland was an important element of changes in the political system of the country. As a result, some tasks of the state were transferred to the local government level. The Public Finance Act of 2009 introduced new public management methods, such as the performance-based budget and the long-term financial forecast, to the local government finance management. The purpose of this paper was to analyse the budget expenses on cultural tasks incurred by local government units in Poland in the years 2003-2010 and the impact of the attempted application of the performance budgeting method to local government expenses relating to this field of economy.

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**Keywords:** Public finance, culture, local government, performance-based budget

## Introduction

Decentralization of public finance in Poland was an important element of changes in the political system of the country. As a result, some tasks of the state were transferred to the local government level. These tasks covered, among others, the field of culture, and were defined as the own tasks of local government units. This in turn forced the local government units to finance these tasks from their own funds. The Public Finance Act of 2009 introduced new public management methods, such as the performance-based budget and the long-term financial forecast, to the local government finance management.

The purpose of this paper was to analyse the budget expenses on cultural tasks incurred by local government units in Poland in the years 2003-2010 and the impact of the attempted application of the performance budgeting method to local government expenses relating to this field of economy. This article outlines the legal frameworks of the local government financial management in Poland and the level of application of the new public management methods. The analysis included expenses incurred by the provinces on culture in the years 2003-2010, taking into account the types of the cultural institutions. Using a model based on the power function, the author falsified a hypothesis, according to which the broadly understood culture might be regarded as a basic, indirect, higher or luxury good, depending on the value of the coefficient of elasticity of the expenses on culture incurred by local government units in relation to the gross regional product.

## Legal fundamentals of the functioning of local government budgets in Poland

Development of the Polish local government and of the fundamentals of its financial management took fourteen years. This process was initiated by the Local Government Act of 8 March 1990 and supplemented by a number of detailed acts. Since 1999 communal [Journal of Laws 2001 No. 142, item 1592], as well as district and provincial [Journal of Laws 2001 No. 142, item 1590] government units have been responsible for the organization of cultural activities in Poland. They are obliged to conduct these activities within the

framework of their own tasks. This was reflected in the legal regulations on the local government revenue sources.

The local government revenue sources were defined in the Constitution of the Republic of Poland and in the Local Government Revenue Act of 13 November 2003. According to the provisions contained in these documents, revenue of local government units in Poland is divided into their own income, general and targeted subsidies. All revenue which is neither general or targeted subsidy is classified as the own income. The division of the revenue sources corresponds to the division of public tasks performed by local governments. The local government units' own tasks are financed from their own income, the own tasks guaranteed by the state (e.g. culture) are financed from their own income and from the general subsidies, and the targeted tasks are financed from the targeted subsidies [ T. Wrona, 2011, p 5].

The budget resolution, which includes the budget of a given unit and attachments, constitutes a basis for the local government financial management. Budget expenses of a particular local government unit are intended in particular for the implementation of its own tasks, for tasks performed together with other local government units, as well as for the in-kind or financial assistance given to other units. In addition, local government units may receive from the budget, as a form of financial assistance, product or producer subsidies, as well as targeted subsidies [Dz. U. /Journal of Laws/ of 2009 No. 175, item 1240].

The Public Finance Act of 27 August 2009 introduces performance-based budget elements, which are to constitute a basis for the development of the State multi-year financial plan. As of today, these provisions apply only to the government subsector. Local government units, despite a lack of legal regulations, use to a certain extent the performance-based budget, because it covers projects co-financed from the EU budget. In the case of local government units, the performance-based budget is a result-oriented budgeting method, in which the expenses take the form of tasks, for which one develops relevant targets and measures. At the local government level, the performance-based budget is called the Local Government Result Budget (LGRB). It is a budget in which the local government management is based on information about the results obtained from expenses incurred on particular budget tasks. This budget can also be understood as an expenditure planning method, in which each increase has to result in a production growth or improved performance. The budgeting process with the application of the LGRB method is based on attempts to improve the process of meeting the social needs with the help of additional funds won for the implementation of a particular task [T. Lubińska 2011 , pp. 180-181].

The Public Finance Act also introduces elements of the performance-based budget to the local government level in the form of a multi-year financial forecast for local government units, in which it is necessary to define current and material multi-year projects. It is also necessary to determine a purpose of each project, the organizational unit responsible for the project implementation and coordination, the period of the project implementation, together with the total financial expenses, expenditure limits in particular years and limits of obligations.

The provisions of the Public Finance Act do not link directly the long-term financial forecast with the performance-based budget, because not all local government units are eligible to implement on a full scale the solutions used in the performance-based budget. This is due to the diversity of the units in terms of their size and organizational structure. However, in order to ensure the consistency of the budget with the multi-year financial forecast, it is necessary to connect them by rendering the budget the form of tasks.

In a given local government unit, depending on the level of application of the performance-based budget methods, one can distinguish three variants of connecting the multi-year financial forecast with the budget:

- 1) the local government budget is managed with taking into account the performance-based budget principles
- 2) the local government budget is managed with the application of the performance-based budget elements
- 3) the local government budget contains no elements of the performance-based budget<sup>60</sup>.

The first variant is the simplest solution to the problem of linking the long-term financial forecast with the budget of a particular local government unit. The unit, managing its financial matters according to the performance-based budget principles, divides its activities into particular tasks, thanks to which it meets the statutory requirements relating to the inclusion of particular tasks in the long-term forecast. It is only necessary to transform each task into parts suitable for the operating, investment or capital budget.

In the second variant, only certain tasks of a given local government unit are covered by standardization. In most cases these tasks include investments and European projects. By placing some activities outside the project category, the given unit becomes unable to transform in a simple way the planned public tasks into elements of the forecast.

The last variant implies the need to transpose the traditional budget into particular items of the forecast. The main criterion for the division of particular incomes and expenses will be their classification by the budget and by the type of their particular components. This means transformation of the classical budget into budgets present in the long-term financial forecast, based on the requirements of the Public Finance Act, owing to which the financial forecast will not be ordering particular tasks, but will only preserve its formal and legal dimension, resulting from the requirements of the Act [T. Lubińska 2011, p 179].

### **Analysis of expenses incurred on culture by local government units in the years 2003-2010**

The analysis of expenses incurred on culture by local government units covers a period from 2003 to 2010. One compared expenses of provinces in three selected years: 2003, 2006 and 2010.

Table 1 presents expenses incurred by local government units on culture and national heritage protection, according to selected sections of the budget classification in 2003, 2006 and 2010.

Provincial budget expenses on culture and national heritage protection were growing steadily in the analysed period. In 2003 they amounted to PLN 2629 million, in 2006 to PLN 4239 million and in 2010 to PLN 7006 million. The per-capita expenditure also grew from PLN 68.84 in the first analysed year to PLN 183.47 in the last year. The highest amounts in particular provinces were spent on the activities of community centers, day-care rooms and clubs. Over PLN 715 million was spent on that goal in 2003, nearly PLN 1,107 million in 2006 and PLN 2225 million in 2010. These amounts prove importance of these cultural institutions in the cultural policy pursued by local government units. In the analysed period the least money was spent on musical theatres, operas and operettas .

The highest expenses on culture and national heritage protection in the years 2003-2010 were incurred by the Mazowieckie province. In the analysed years they mounted to PLN 374.825 million in 2003, PLN 780.899 million in 2006 and in PLN 1205.208 million in 2010. The least money on culture was spent by the Świętokrzyskie province, despite the fact that the expenses of local government units in the analysed period were growing. The above statistical data show that in 2003 the expenses amounted to PLN 60.744 million in 2006,

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<sup>60</sup> Ibidem, s. 288.

grew to PLN 92.269 million in 2006 and reached the amount of PLN 209.347 million in 2010.

Taking into account the per-capita expenditure on culture, one has to note that the difference in expenses incurred by the Mazowieckie and Świętokrzyskie provinces in the analysed years was changing. In 2003 it amounted to PLN 25.95, in 2006 it increased to the amount of PLN 79.22 and in 2010 it decreased to the amount of PLN 65.27.

The Śląskie province came second in terms of the total expenditure on culture in the analysed period, whereas the Dolnośląskie province ranked second in terms of the per-capita expenditure.

When analyzing the expenses incurred by local government units on museums in the years 2003-2010, one can see a considerable increase. The Mazowieckie and Małopolskie provinces were the highest spenders. In 2003 the least money was spent by the Lubuskie (PLN 7.014 million), Opolskie (PLN 8.414 million) and Podlaskie (PLN 9.487 million) provinces, in 2006 - by the Świętokrzyskie (PLN 12.848 million), Lubuskie (PLN 13.099 million) and Opolskie (PLN 19.592 million) provinces. Similarly, in 2010 local governments in the Lubuskie (PLN 29.095 million), Warmińsko-Mazurskie (PLN 32.220 million) and Podlaskie (PLN 32.420 million) provinces spent the least money, despite an over threefold increase in these expenses compared to 2003.

**Table 1** Expenses incurred by local government units on culture and national heritage protection, according to selected sections of the budget and province classification in the years 2003 - 2010

2003 Provinces	Total expenditure of local government units on culture in PLN million	Per-capita expenditure of local government units on culture in PLN	Expenditure on particular sections in PLN million					Number of inhabitants in millions	Gross regional product in current prices in PLN billion
			Museums as well as protection and care of historic monuments	Libraries	Community centres and houses, day-care rooms and clubs	Theatres	Musical theatres, operas and operettas		
<b>Poland</b>	<b>2629.085</b>	<b>68.84</b>	<b>379.085</b>	<b>683.579</b>	<b>715.347</b>	<b>246.188</b>	<b>167.090</b>	<b>38.191</b>	<b>843.156</b>
Dolnośląskie	250.383	86.39	37.773	53.395	61.208	24.845	26.123	2.898	65.552
Kujawsko-pomorskie	126.379	61.11	17.708	31.674	31.412	10.599	12.135	2.068	40.916
Lubelskie	126.189	57.59	19.741	40.387	40.483	6.122	4.444	2.191	34.198
Lubuskie	64.178	63.62	7.014	16.623	27.344	4.114	0.000	1.009	19.254
Łódzkie	194.483	74.88	32.563	42.088	42.452	17.692	30.358	2.597	52.977
Małopolskie	226.661	69.68	31.763	50.042	75.208	20.666	10.947	3.253	61.531
Mazowieckie	374.825	72.98	44.779	107.092	83.930	70.340	21.081	5.136	176.073
Opolskie	64.993	61.57	8.414	17.710	25.715	6.134	0.000	1.056	18.532
Podkarpackie	124.676	59.45	23.637	33.951	44.768	4.115	0.000	2.097	32.780
Podlaskie	71.370	59.22	9.487	17.779	22.690	8.277	0.000	1.205	20.210
Pomorskie	163.075	74.50	29.199	34.281	33.788	9.379	16.172	2.189	47.445
Śląskie	335.255	71.10	43.767	98.176	85.435	20.389	19.864	4.715	113.454
Świętokrzyskie	60.744	47.03	10.051	18.254	16.698	3.346	0.200	1.292	22.289
Warmińsko-mazurskie	85.779	60.03	13.100	25.830	26.778	6.079	0.000	1.429	24.868
Wielkopolskie	247.216	73.58	37.719	64.279	58.083	23.360	21.001	3.360	77.600
Zachodniopomorskie	112.879	66.55	12.370	32.018	39.355	10.731	4.765	1.696	35.477

2007 Provinces	Total expenditure of local government units on culture in PLN million	Per-capita expenditure of local government units on culture in PLN	Expenditure on particular sections in PLN million					Number of inhabitants in millions	Gross regional product in current prices in PLN billion
			Museums as well as protection and care of historic monuments	Libraries	Community centres and houses, day-care rooms and clubs	Theatres	Musical theatres, operas and operettas		
<b>Poland</b>	<b>4239.141</b>	<b>111.17</b>	<b>792.788</b>	<b>881.607</b>	<b>1106.784</b>	<b>614.726</b>	<b>135.564</b>	<b>38.126</b>	<b>1060.031</b>
Dolnośląskie	392.970	136.25	82.076	69.231	106.751	56.756	13.447	2.884	85.774
Kujawsko-pomorskie	241.458	116.85	42.352	41.410	51.647	67.137	8.742	2.066	50.217
Lubelskie	180.756	83.10	36.180	49.401	58.344	15.094	5.417	2.175	40.849
Lubuskie	104.258	103.39	13.039	21.326	44.627	5.578	2.326	1.008	24.942
Łódzkie	228.450	88.84	46.144	46.797	57.522	46.141	8.171	2.572	65.628
Małopolskie	378.994	115.98	84.102	68.003	95.832	59.303	13.074	3.268	78.789
Mazowieckie	780.899	151.20	173.979	156.456	134.896	164.535	2.540	5.165	229.212
Opolskie	120.230	115.12	19.592	24.032	42.548	10.654	9.902	1.044	23.338
Podkarpackie	184.699	88.08	38.571	41.869	66.228	5.401	5.324	2.097	39.894
Podlaskie	120.129	100.31	15.764	22.185	37.108	9.240	5.857	1.198	24.427
Pomorskie	260.068	118.16	65.364	39.344	50.786	28.728	18.732	2.201	60.250
Śląskie	493.897	105.60	72.041	133.667	115.709	60.506	16.043	4.677	137.959
Świętokrzyskie	92.269	71.98	12.846	22.414	32.307	4.922	3.813	1.282	27.084
Warmińsko-mazurskie	138.459	97.02	20.441	31.601	39.716	10.087	4.050	1.427	29.977
Wielkopolskie	325.711	96.52	48.029	74.585	90.456	49.882	11.170	3.375	98.806
Zachodniopomorskie	195.894	115.67	22.266	39.286	82.306	20.761	6.955	1.694	42.887

2010 Provinces	Total expenditure of local government units on culture in PLN million	Per-capita expenditure of local government units on culture in PLN	Expenditure on particular sections in PLN million					Number of inhabitants in millions	Gross regional product in current prices in PLN billion
			Museums as well as protection and care of historic monuments	Libraries	Community centres and houses, day-care rooms and clubs	Theatres	Musical theatres, operas and operettas		
<b>Poland</b>	<b>7006.228</b>	<b>183.47</b>	<b>1216.886</b>	<b>1145.187</b>	<b>2224.730</b>	<b>691.804</b>	<b>288.086</b>	<b>38.187</b>	<b>1415.362</b>
Dolnośląskie	648.662	225.46	108.195	84.013	220.329	58.970	64.246	2.877	116.367
Kujawsko-pomorskie	347.588	167.95	88.684	55.522	102.676	32.778	11.262	2.070	65.029
Lubelskie	319.356	148.20	42.723	70.585	113.121	17.584	8.107	2.155	53.820
Lubuskie	243.035	240.46	29.095	33.113	95.916	6.655	2.895	1.011	31.985
Łódzkie	396.122	156.05	54.791	64.624	100.854	86.728	14.604	2.538	86.257
Małopolskie	619.790	187.57	170.967	84.344	152.262	54.125	18.816	3.304	104.842
Mazowieckie	1205.208	230.33	220.117	206.179	412.665	156.682	15.440	5.233	309.729
Opolskie	216.874	210.58	43.737	32.312	89.257	10.777	9.813	1.030	31.271
Podkarpackie	311.265	148.03	58.251	56.232	123.246	8.272	13.650	2.103	53.400
Podlaskie	239.453	201.36	32.420	31.583	76.967	10.616	7.723	1.189	32.559
Pomorskie	427.837	191.38	68.195	55.611	87.453	59.784	17.833	2.236	80.329
Śląskie	713.775	153.88	120.907	144.151	175.403	62.503	46.314	4.639	184.720
Świętokrzyskie	209.347	165.06	34.833	31.743	65.579	6.791	14.812	1.268	36.609
Warmińsko-mazurskie	247.691	173.50	32.220	40.961	85.785	20.283	13.394	1.428	39.063
Wielkopolskie	538.386	157.69	71.344	100.994	176.437	66.509	17.034	3.414	134.187
Zachodniopomorskie	321.839	190.04	40.408	53.219	146.779	32.747	12.142	1.694	55.197

Source: own study on the basis of data from relevant statistical yearbooks of the Central Statistical Office

Expenses on library activities incurred by local government units in particular provinces were also growing and differed significantly in the analysed period. In the years

2003, 2006 and 2010 the Mazowieckie province (PLN 107.092 million in 2003, PLN 156.456 million in 2006 and PLN 206.179 million in 2010), the Śląskie province (PLN 98.176 in 2003, PLN 133.667 million in 2006 and PLN 144.151 million in 2010) and the Wielkopolskie province (PLN 64.279 million in 2003, PLN 74.585 million in 2006 and PLN 100.994 million in 2010) spent the most money on this goal. In 2003 the least money was spent by the Lubuskie (PLN 16.623 million), Opolskie (PLN 17.710 million) and Podlaskie (PLN 17.779 million) provinces, in 2006 - by the Lubuskie (PLN 21.326 million), Podlaskie (PLN 22.185 million) and Świętokrzyskie (PLN 22.414 million) provinces, and in 2010 by the Podlaskie (PLN 31.583 million), Świętokrzyskie (PLN 31.743 million) and Lubuskie (PLN 33.113 million) provinces.

The presented analysis shows that in the entire analysed period, the local government units of the Lubuskie province responsible for the activities of libraries, spent, compared to other local government units (despite the increased expenses) the least money.

In 2003 the highest expenses on community centres and houses, day-care rooms and clubs were incurred by the Mazowieckie (PLN 83.930 million), Śląskie (PLN 85.435 million) and Małopolskie (PLN 75.208 million) provinces. In 2006 these were the Mazowieckie (PLN 134.896 million), Śląskie (PLN 115.709 million) and Dolnośląskie (PLN 106.751 million) provinces, and in 2010 - the Mazowieckie (PLN 412.665 million), Dolnośląskie (PLN 220.329 million) and Wielkopolskie (PLN 100.994 million) provinces. The least expenses in the analysed period were incurred in 2003 by the Świętokrzyskie (PLN 16.698 million), Podlaskie (PLN 22.690 million) and Opolskie (PLN 25.715 million) provinces. In 2006 these were the Świętokrzyskie (PLN 32.307 million), Podlaskie (PLN 37.108 million) and Warmińsko-Mazurskie (PLN 39.716 million) provinces, and in 2009 - again the Świętokrzyskie (PLN 65.579 million), Warmińsko-Mazurskie (PLN 85.785) and Pomorskie (PLN 87.453 million) provinces.

In the analysed period one also saw increased expenses incurred by particular provinces on theatre. In 2003 the highest expenses for this purpose were incurred by the Mazowieckie (PLN 70.340 million), Dolnośląskie (PLN 24.845 million) and Wielkopolskie (PLN 23.360 million) provinces. In 2006 these were the Mazowieckie (PLN 164.535 million), Kujawsko-Pomorskie (PLN 67.137 million) and Śląskie (PLN 60.506 million) provinces, and in 2010 the Mazowieckie (PLN 156.682 million), Wielkopolskie (PLN 66.509 million) and Łódzkie (PLN 86.728 million) provinces. The least expenses on theatres in the years 2003-2010 were incurred by the Świętokrzyskie, Lubuskie and Podkarpackie provinces.

In the case of expenses incurred by particular provinces on musical theatres, operas and operettas, the biggest growth, when comparing 2003 to 2010, was recorded in the Lubuskie, Opolskie, Podkarpackie, Podlaskie and Warmińsko-Mazurskie provinces. In the first analysed year no expenses for this purpose were recorded for the above-mentioned provinces. In 2010 those expenses amounted to PLN 13.650 million in the Podkarpackie province, PLN 13.394 million in the Warmińsko-Mazurskie province, PLN 9.813 million in the Opolskie province, PLN 7.723 million in the Podlaskie province and PLN 2.895 million in the Lubuskie province. In 2003 the highest expenses for this purpose were incurred by the Dolnośląskie (PLN 26.123 million), Mazowieckie (PLN 21.081 million) and Wielkopolskie (PLN 21.001 million) provinces, in 2006 by the Pomorskie (PLN 18.732 million), Śląskie (PLN 16.043 million) and Dolnośląskie (PLN 13.447 million) provinces, and in 2010 by the Dolnośląskie (PLN 64.246 million), Śląskie (PLN 46.314 million) and Mazowieckie (PLN 18.816 million) provinces.

To examine the overall impact of the changes in the gross regional product on the amount of expenses on culture incurred by local government units in particular provinces, one applied a relevant power model to estimate the coefficients of elasticity, which can be used to assess particular decisions in the field of cultural policy.

In the case of cultural goods and services subject to the classic economic laws of supply and demand, one can assume that both the supply of and demand for these goods is not significantly different from the supply of/demand for other goods or services. What affects the different definition of this function is the special role of the price, which is assumed to be the amount of the costs incurred by the decision-makers.

By analogy to the classical theory of demand, one has assumed that, depending on the value of the coefficient of elasticity of the expenses on culture incurred by local government units in relation to the gross regional product, the broadly understood culture may be regarded as a basic, indirect, higher or luxury good.

As mentioned previously, to estimate the coefficients of elasticity, one used a power equation model. The power function, due to its properties, helps one to match the theoretical model with the non-linear course of empirical data, and allows one to make a direct interpretation of the parameters as coefficients of elasticity of expenses incurred by local government units (average for the sample).

One used for this purpose spatial data covering 16 provinces for the years 2003, 2006 and 2010 (Table 1). The estimation results shown in Table 2 are satisfactory both from the substantive and statistical points of view. In the estimated logarithmic model, the estimation of the parameter at the variable  $\ln$  (GDP in current prices) is statistically significantly different from zero, and the high value of the coefficient of determination provides a good explanation for the development of the total expenditure on culture through the changeable value of the gross regional product.

The obtained results indicate that in the analysed years, the values of the coefficients of the total expenditure on culture in relation to the regional (provincial) product were less than unity. This means that the impact of the regional product on the total expenditure on culture was less than proportional. In any case the elasticity of the total expenditure on culture in relation to the gross regional product in 2003, 2006, 2010 (average for the sample) was at the level of 0.894, 0.867 and 0.726 respectively, which means that an increase in the gross regional product by 1 % resulted in an average increase in the total expenditure on culture by approximately 0.89 %, 0.87 % and 0.73 % respectively, and showed a downward trend.

**Table 2.** Estimation of elasticity of expenses incurred by provinces on culture in relation to the value of the gross regional product in the years 2003-2010.

Year	2003	2006	2010
	Estimate (stat. t-Student)		
absolute term	2.3173 (4.00)	2.6426 (4.56)	4.7683 (11.08)
$\ln(\text{GDG in current prices})$	0.8943 (16.50)	0.8667 (16.70)	0.7255 (18.84)
$R^2_{sk}$ coefficient of determination	0.9476	0.9488	0.9593

Source: own calculations

In conclusion it should be noted that the total expenditure on culture is inflexible in relation to the gross regional product, i.e. a significant change in the amount of the regional product results only in small changes in the total expenditure on culture, and the local government units in their investment decisions and their cultural policies treat culture as a basic good [D. Begg, 2003, pp. 113-114]

The results of previous analyses indicated the existence of differences in the amounts of expenditure on various cultural activities in particular provinces. In the years 2003-2010 particular local government units also achieved different values of the gross regional product. When analyzing these results, one can make an assumption about the uneven level of expenses incurred by local government units on culture in general and on specific types of

activities. So one can assume that these categories of provincial budget expenditure are influenced by decisions related to the division of the generated gross regional product. To characterize this situation, similarly as in the case of the total expenditure on culture, one estimated for each province for the years 2003-2010 the coefficients of elasticity of expenditure on particular cultural institutions in relation to the total expenditure on culture, using for this purpose the power model (double logarithmic model).

**Table 3.** Impact of changes in the level of the total expenditure on culture on the expenses incurred by the provinces on particular cultural institutions in the years 2003-2010.

	Estimation of the parameter	Statistics of the t-Student	Estimation of the parameter	Statistics of the t-Student
	Total expenses on culture incurred by local government units			
	absolute terms		ln( <i>GDP in current prices</i> )	
Dolnośląskie	-6.06	-3.04	1.67	9.52
Kujawsko-pomorskie	-9.14	-3.81	1.97	8.91
Lubelskie	-9.07	-3.88	1.99	9.08
Lubuskie	-14.31	-6.66	2.56	12.09
Łódzkie	-5.97	-2.57	1.66	7.96
Małopolskie	-9.12	-4.22	1.94	10.18
Mazowieckie	-11.48	-5.17	2.02	11.28
Opolskie	-9.48	-4.61	2.09	10.30
Podkarpackie	-7.38	-3.34	1.84	8.84
Podlaskie	-13.19	-6.09	2.45	11.49
Pomorskie	-8.37	-3.85	1.89	9.59
Śląskie	-5.87	-2.29	1.60	7.42
Świętokrzyskie	-10.99	-5.43	2.20	11.14
Warmińsko-mazurskie	-10.09	-4.27	2.12	9.29
Wielkopolskie	-3.49	-1.56	1.41	7.28
Zachodniopomorskie	-11.85	-4.81	2.24	9.75
R <sup>2</sup>	0.9999			
	Expenses on museums incurred by local government units			
	absolute terms		ln( <i>GDP in current prices</i> )	
Dolnośląskie	-4.74	-2.20	1.23	7.38
Kujawsko-pomorskie	-8.95	-4.30	1.59	9.38
Lubelskie	-3.32	-1.60	1.13	6.62
Lubuskie	-2.81	-1.98	1.06	8.72
Łódzkie	-2.24	-0.92	1.04	5.37
Małopolskie	-9.11	-4.62	1.58	10.35
Mazowieckie	-4.44	-2.35	1.20	8.65
Opolskie	-7.23	-4.21	1.47	10.00
Podkarpackie	-4.38	-2.02	1.23	6.90
Podlaskie	-1.17	-0.75	0.93	6.99
Pomorskie	0.50	0.24	0.83	5.08
Śląskie	-7.59	-2.75	1.43	6.81
Świętokrzyskie	-1.76	-1.11	1.00	7.28
Warmińsko-mazurskie	-2.79	-1.41	1.08	6.44
Wielkopolskie	-1.14	-0.42	0.94	4.37
Zachodniopomorskie	-4.30	-2.22	1.18	7.37
R <sup>2</sup>	0.9999			
	Estimation of the parameter	Statistics of the t-Student	Estimation of the parameter	Statistics of the t-Student
	Expenses on libraries incurred by local government units			
	absolute terms		ln( <i>GDP in current prices</i> )	
Dolnośląskie	5,08	6.65	0.47	7.97
Kujawsko-pomorskie	4,54	6.17	0.50	8.31



Lubelskie	4,54	6.18	0.52	8.59
Lubuskie	5,19	10.31	0.42	9.69
Łódzkie	4,39	5.11	0.52	7.50
Małopolskie	4,88	6.99	0.48	8.95
Mazowieckie	4,23	6.34	0.57	11.60
Opolskie	4,21	6.94	0.50	9.68
Podkarpackie	4,42	5.77	0.51	8.18
Podlaskie	4,92	8.95	0.44	9.37
Pomorskie	3,74	5.19	0.56	9.65
Śląskie	4,72	4.83	0.53	7.20
Świętokrzyskie	4,78	8.51	0.46	9.46
Warmińsko-mazurskie	5,44	7.75	0.42	7.10
Wielkopolskie	3,83	3.95	0.59	7.69
Zachodniopomorskie	4,86	7.08	0.47	8.40
R <sup>2</sup>	0,9998			
	Expenses on community centres incurred by local government units			
	absolute terms		ln( <i>GDP in current prices</i> )	
Dolnośląskie	-3,75	-2.69	1.19	11.02
Kujawsko-pomorskie	-2,72	-2.02	1.11	10.05
Lubelskie	-1,01	-0.75	0.99	8.91
Lubuskie	0,57	0.62	0.87	11.07
Łódzkie	-2,17	-1.38	1.06	8.39
Małopolskie	3,00	2.35	0.67	6.71
Mazowieckie	-6,31	-5.16	1.35	15.00
Opolskie	-1,25	-1.12	1.02	10.70
Podkarpackie	-2,48	-1.76	1.12	9.74
Podlaskie	-0,14	-0.14	0.91	10.62
Pomorskie	-0,97	-0.74	0.95	8.97
Śląskie	-0,72	-0.40	0.95	6.97
Świętokrzyskie	-2,50	-2.43	1.11	12.51
Warmińsko-mazurskie	-2,13	-1.66	1.08	9.97
Wielkopolskie	-6,05	-3.40	1.37	9.83
Zachodniopomorskie	-3,14	-2.50	1.18	11.39
R <sup>2</sup>	0,9997			
	Estimation of the parameter	Statistics of the t-Student	Estimation of the parameter	Statistics of the t-Student
	Expenses on theatres incurred by local government units			
	absolute terms		ln( <i>GDP in current prices</i> )	
Dolnośląskie	-3.95	-1.28	1.13	4.75
Kujawsko-pomorskie	-7.83	-2.63	1.46	6.02
Lubelskie	-6.37	-2.14	1.29	5.29
Lubuskie	2.70	1.32	0.51	2.93
Łódzkie	-17.96	-5.16	2.28	8.21
Małopolskie	-6.13	-2.17	1.31	5.97
Mazowieckie	0.92	0.34	0.80	4.02
Opolskie	3.30	1.34	0.51	2.41
Podkarpackie	1.41	0.45	0.60	2.35
Podlaskie	5.32	2.39	0.33	*1.71
Pomorskie	-15.17	-5.20	2.04	8.71
Śląskie	-14.39	-3.64	1.91	6.35
Świętokrzyskie	1.74	0.77	0.58	2.97
Warmińsko-mazurskie	-1.43	-0.50	0.91	3.78
Wielkopolskie	-11.04	-2.81	1.69	5.50

Zachodniopomorskie	-4.09	-1.47	1.15	5.03
R <sup>2</sup>	0.9991			
	Expenses on musical theatres incurred by local government units			
	absolute terms		ln( <i>GDP in current prices</i> )	
Dolnośląskie	3.82	0.37	0.50	*0.62
Kujawsko-pomorskie	14.29	1.42	-0.41	*-0.50
Lubelskie	4.53	0.45	0.35	*0.43
Lubuskie	-25.77	-3.76	2.78	4.73
Łódzkie	17.50	1.49	-0.63	*-0.67
Małopolskie	6.48	0.68	0.25	*0.34
Mazowieckie	17.26	1.90	-0.58	*-0.86
Opolskie	-50.85	-6.14	4.99	7.03
Podkarpackie	-70.09	-6.71	6.35	7.41
Podlaskie	-43.10	-5.75	4.30	6.72
Pomorskie	6.95	0.71	0.22	*0.28
Śląskie	4.28	0.32	0.44	*0.43
Świętokrzyskie	-44.06	-5.76	4.46	6.73
Warmińsko-mazurskie	-63.08	-6.60	5.95	7.37
Wielkopolskie	16.12	1.22	-0.50	*-0.48
Zachodniopomorskie	-3.37	-0.36	1.01	*1.31
R <sup>2</sup>	0.9945			

\* Statistically insignificant estimations different from zero at the significance level of 0.10

Source: own study on the basis of data from statistical yearbooks for the provinces, Central Statistical Office

The obtained results of the estimation of particular equations are presented in Table 6.14. The estimated coefficients of elasticity of the expenditure on particular types of cultural institutions in the provinces in relation to the total expenditure on culture are statistically significantly different from zero. The exceptions include expenditure on musical theatres, operas and operettas.

The total expenses on culture incurred by local government units in relation to expenses incurred by the budgets of particular provinces are characterized by a relatively high ( $E > 1$ ) values of the coefficients of elasticity. A comparison of the values of these coefficients shows that in the years 2003-2010 a percentage (relative) change in the expenditure in these provinces results in a bigger percentage change in the total expenditure on culture in these provinces. Thus, the total expenditure on culture, as an economic good, indicates that in the analysed period culture was a luxury good for the decision-makers. In seven provinces a 1% increase in the expenditure on culture resulted in an over 2% (from 2.02 % to 2.56% ) increase in expenditure on cultural institutions. The highest values were recorded for the Lubuskie (2.56 %) and Podlaskie (2.45 %) provinces, and the lowest one was recorded for the Wielkopolskie province (1.41 %).

This dependence is slightly weaker in the case of expenditure on community centers, day-care rooms and clubs. For those cultural institutions a 1% increase in the expenditure on culture resulted in a proportional increase in the expenditure on these institutions.

In the case of museums, only in three provinces, the values of the estimated coefficients of elasticity were less than unity - in the Wielkopolskie (0.94%), Podlaskie (0.93%) and Pomorskie (0.83%) provinces. The values of the coefficients of elasticity in the remaining provinces were more than unity, which indicates a flexible nature of the expenditure on museums in relation to the total expenses on culture incurred by local government units.

## **Conclusion**

In Poland one can observe a relatively high involvement of local government units in the culture financing process. This results, among others, from the current law, which considers activities of local government units in the field of culture as their own tasks, which in turn means that these units have to use their own funds to finance such activities.

Both the total expenditure on culture and the per-capita expenditure on culture, made from the local government budgets, were increasing steadily in the analysed period. The richest provinces (Mazowieckie, Śląskie and Dolnośląskie) are the leaders in this respect, whereas the Świętokrzyskie province incurred the least expenses on culture.

The total expenditure on culture from the local government budgets in the analysed period is inflexible in terms of the gross regional product. This means that a significant change in the amount of the regional product results only in small changes in the total expenditure on culture, and the local government units in their investment decisions and their cultural policies treat culture as a basic good.

Local government units, despite a lack of legal regulations, use to a certain extent the performance-based budget, because it covers projects co-financed from the EU budget. At the local government level, the performance-based budget is called the Local Government Result Budget (LGRB). The budgeting process with the application of the LGRB method is based on attempts to improve the process of meeting the social needs with the help of additional funds won for the implementation of particular tasks. The Public Finance Act has also introduced the multi-year financial forecast method. Both methods resulted in increased expenditure from the local government budgets on culture during their application.

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